

Products.java

```
package com.ecommerce;

import java.sql.*;

public class Products {

    public static void main(String[] args) {

        try {

            // Step 1: Set up the database connection

            String url = "jdbc:mysql://localhost/ecommerce";

            String username = "root";

            String password = "root";

            Connection connection = DriverManager.getConnection(url, username,
password);

            // Step 2: Fetch data and count products of similar types

            countSimilarProducts(connection);

            // Close the database connection

            connection.close();

        } catch (SQLException e) {

            e.printStackTrace();

        }

    }

    private static void countSimilarProducts(Connection connection) throws
SQLException {

        String countQuery = "SELECT product_type, COUNT(*) AS
similar_products_count FROM products GROUP BY product_type";

        Statement statement = connection.createStatement();

        ResultSet resultSet = statement.executeQuery(countQuery);

        System.out.println("Product Type | Count");

        System.out.println("-----");

        while (resultSet.next()) {

            String productType = resultSet.getString("product_type");

            int count = resultSet.getInt("similar_products_count");
```

```
System.out.println(productType + " | " + count);  
}  
resultSet.close();  
statement.close();  
}  
}
```

SQL DataBase

```
CREATE DATABASE ecommerce;
```

```
USE ecommerce;
```

```
CREATE TABLE products (
```

```
  s_no INT PRIMARY KEY AUTO_INCREMENT,
```

```
  product_name VARCHAR(255),
```

```
  product_price DECIMAL(10, 2),
```

```
  manufacturing_year INT,
```

```
  product_type VARCHAR(50)
```

```
);
```

```
INSERT INTO products (product_name, product_price, manufacturing_year, product_type)
```

```
VALUES
```

```
('Product 1', 2000, 2020, 'Type C'),
```

```
('Product 2', 3049, 2019, 'Type D'),
```

```
('Product 3', 5743, 2021, 'Type A'),
```

```
('Product 4', 5332, 2018, 'Type D'),
```

```
('Product 5', 3423, 2022, 'Type B'),
```

```
('Product 6', 2234, 2017, 'Type C'),
```

```
('Product 7', 5326, 2023, 'Type D'),
```

```
('Product 8', 8183, 2020, 'Type A'),
```

```
('Product 9', 2112, 2019, 'Type B'),
```

```
('Product 10', 1122, 2021, 'Type C');
```